



**US Army Corps
of Engineers**

HUNTSVILLE ENGINEERING
AND SUPPORT CENTER

FINAL

**ORDNANCE AND EXPLOSIVES
ARCHIVES SEARCH REPORT**

FINDINGS

**U. S. COAST GUARD
SUPPORT CENTER**

GOVERNORS ISLAND

NEW YORK COUNTY, NEW YORK

JULY 1997

**PREPARED BY
US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT**

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1.0 INTRODUCTION

1.1 AUTHORITY

The U.S. Department of Transportation (DOT) is under mandate from the Federal government to reduce costs. The U.S. Coast Guard, which is an agency of the DOT, has been tasked to reduce costs in a manner which will not affect its operational mission. The closure of Governors Island, New York and relocation of the Coast Guard functions to other sites will fulfill this mission.

The U.S. Coast Guard (USCG), Civil Engineering Unit (CEU), Providence, Rhode Island contracted with U.S. Army Engineer District, St. Louis (CELMS) to prepare an Archives Search Report (ASR) for Ordnance and Explosives (OE) and Chemical Warfare Material (CWM) for Governors Island, New York.

1.2 SCOPE

The history of Governors Island was investigated through searches at various archives and records holding facilities for the types, quantities, and probable locations of ordnance items, possible disposal areas, and any unknown training areas. Information contained herein is based on the review of existing historical documents and maps, interviews with individuals associated with the site or its operations, and personal visits to the site. The information collected during this process is used in developing recommendations for further actions at the site.

2.0 SITE DESCRIPTION

2.1 LAND USAGE/REAL ESTATE

When originally sold to the Dutch governor of New Amsterdam by a Native American tribe in 1637, Governors Island was covered by a variety of nut trees. Since then, the island has been used as a quarantine station, a game preserve, the private residence of the colonial governors of New York, and a race track with an accompanying hotel (Guilds Committee 1992). From 1794 to 1966, the U. S. Army used the island extensively as a defense fortification and administrative headquarters. From 1966 to the present, the U. S. Coast Guard has used the island as the headquarters for many of its activities in the New York area and the eastern United States. The Coast Guard will dispose of the island by 1998, and its future use has not been determined at this time (U. S. Coast Guard, Atlantic Area, Public Affairs Office 1996).

The federal government acquired the island through several real estate transactions with the State of New York. On 15 February 1800, New York's state legislature gave the original island to the federal government for the defense of New York City. Later in 1880, 1901, and 1903, New York gave the government additional submerged land adjacent to the island. Much of this underwater land was filled in by the military in early twentieth century. In 1966, the Department of the Army transferred the property, in its entirety, to the Department of the Treasury for a U. S. Coast Guard Base. The Environmental Baseline Survey, prepared by ABB Environmental Services, Inc., puts the island's size at approximately 172 acres, but documentation acquired from the New York District of the U. S. Army Corps of Engineers says that the 1966 transfer consisted of 204.5 acres (War Department 1937a; ABB Environmental Services, Inc. 1996: Sec. 3-1; n.a. 1967a). This discrepancy could be attributed to the erosion of the island, or the larger figure may include still-submerged land.

2.2 CLIMATIC DATA

Governors Island, New York, is close to the path of most storm and frontal systems which move across North America. Weather conditions most often approach from a westerly direction.

Governors Island can experience higher temperatures in summer and lower temperatures in winter than would otherwise be expected in a coastal area. However, the frequent passage of weather systems often helps reduce the length of both warm and cold spells and is also a major factor in keeping periods of prolonged air stagnation to a minimum.

During the summer, local area sea breezes often moderate the afternoon heat. The relatively warm water temperatures also delay the advent of winter snows. Conversely, the lag in warming of water temperatures keeps spring temperatures relatively cool. July and August are the hottest months with an average monthly temperature of 75 and 74 degrees, respectively. The record high temperature occurred in July of 1966 with a temperature of 104 degrees. January is the coldest month with an average monthly temperature of 31.3 degrees. The record low temperature of -2 degrees occurred in January of 1985.

Precipitation is moderate and distributed fairly evenly throughout the year. Most of the rainfall from April through October comes from thunderstorms and are usually brief in duration and sometimes intense. For the other months of the year, precipitation is more likely to be associated with widespread storm areas, so that day-long rain or snow is more common. Coastal storms most often occurred in the fall and winter months. These storms have been responsible for record rains, snows, and high winds. The average annual rainfall total is 41.76 inches. The average annual snowfall is approximately 31 inches. The wettest month is August with an average monthly precipitation of 4.1 inches. The maximum monthly precipitation is 17.41 inches which occurred in August of 1955. The maximum 24 hour precipitation is 6.59 inches and also occurred in August 1955. The average annual wind velocity is 11.9 mph. March is the windiest month with an average velocity of 13.7 mph.

Climatological data for this area are summarized in TABLE 2-1. Data were collected at the National Weather Service meteorological station at J.F.K. International Airport, New York.

TABLE 2-1
CLIMATOLOGICAL DATA FOR
J.F.K. INTERNATIONAL AIRPORT, NEW YORK

Month	Temperature		Precipitation	Wind	
	Average Minimum (°F)	Average Maximum (°F)		Average Speed Miles/Hour	Average Direction
January	25.1	37.5	2.93	13.3	W
February	25.9	39.1	3.20	13.5	NW
March	33.2	46.6	3.99	13.7	NE
April	42.3	58.3	3.76	13.0	E
May	51.7	67.7	3.40	11.6	N
June	61.0	76.9	2.98	10.8	NW
July	67.2	82.7	3.56	10.3	SW
August	66.3	81.7	4.10	10.1	W
September	59.2	75.2	3.51	10.5	W
October	48.7	64.7	2.98	11.1	NW
November	39.6	53.2	3.73	12.3	W
December	29.6	41.8	3.62	12.8	E
Average	45.8	60.5	41.76	11.9	N

2.3 GEOLOGY AND SOILS

2.3.1 GEOLOGY AND PHYSIOLOGY

The Governors Island site is located in the Piedmont Lowland physiographic province on the east side of Upper New York Bay. This area lies on the eastern edge of the broad lowland known as the Newark basin which was formed in the Triassic period and extends today from the first Watchung Mountain on the west to the Hudson River on the east. The Triassic period bedrock in this vicinity consists

of continental sandstones, shales and conglomerates that seem to have accumulated in downfaulted troughs (Thornbury 1965). These sandstones and shales are known as the Newark Series and in places are nearly 250 feet below sea level. In the early Jurassic period, the Palisades sill was intruded into the Triassic deposits. This igneous sill of quartz diabase is exposed today in the Palisades in eastern New Jersey (Herpers and Barksdale 1951).

The Newark basin deposits are overlain by a sequence of glacial lacustrine clays and glacial drift which were deposited during the Wisconsin stage of glaciation towards the end of the Pleistocene Epoch. Around this time Governors Island lay on the western edge of glacial Lake Hudson close to its boundary with glacial Lake Hackensack. The southern tip of the Palisades sill projected as a ridge of dry land between the two lakes during this period. Both lakes were created as a result of the terminal moraine laid down at the furthest point of the glacial advance. In the Newark basin area, this moraine extended from Summit on the first Watchung ridge, and looped south through Plainfield and Perth Amboy, before crossing Staten Island into southern Long Island (Dresdner Associates, Inc. 1991).

The main geologic formations in the site area are Stockton Sandstone, Manhattan Schist and Palisades Diabase. Depth to bedrock ranges from 170 feet to bedrock at or near the surface. Glacial deposits generally range from 25 to 165 feet and cover most bedrock in the area. Recent alluvial deposits of sand, gravel, silt, clay and peat lie above the glacial deposits. In some areas miscellaneous fill has been placed. Lands in the site and surrounding areas are composed of tidal marsh, reclaimed land, and areas of glacial deposits (Dresdner Associates, Inc. 1984).

2.3.2 SOILS

The surface of the site is largely covered by concrete, asphalt and buildings. The soils underlying these areas have been greatly altered from their original state.

The remaining site soils are derived from tidal and glacial deposits. The deposits are generally composed of sandy material. The depth of these deposits ranges from 5 to 32 feet. Below the sand stratum, there are glacial lake deposits consisting of silt, clayey silt, silty clay and sand. This deposit has been highly overconsolidated. Glacial till deposits occur beneath the glacial lake deposits and consist of very dense silts, clays, sands, gravels and boulders. Bedrock of the Stockton Formation consisting of shale and sandstone is found beneath the glacial till deposits. The

upper portion of this bedrock has weathered to a hard silty clay containing interbedded rock fragments (Dresdner Associates, Inc. 1984).

2.4 HYDROLOGY

2.4.1 SURFACE WATER

Governors Island is located on the west side of Long Island, in the Upper Bay of New York. Governors Island is affected by semidiurnal tides, which are two nearly equal high waters and two nearly equal low waters each tidal day. The Labrador Current Extension in the Atlantic Ocean flows along the eastern side of Long Island. The ocean current flows south and has an average speed of 0.5 knots in the summer and 0.7 knots in the winter. The mean temperature of the sea surface water is 70° in the summer and 40° in the winter. There is a 10% chance of having waves of 5 feet or higher in the summer and 30% in the winter.

Surface water drains directly into the Upper Bay. No major streams are located on Governors Island and no flood data is available. If flooding would occur it would be from localized heavy rainfall and would be of short duration.

The following tidal data for Governors Island is from The Battery, which is just south of the site area. Elevations of tidal datums referred to are in mean lower low water (MLLW) and is 0.00 feet.

Highest observed water level...	10.23 feet
Mean higher high water.....	5.12 feet
Mean high water.....	4.78 feet
Mean tidal level.....	2.50 feet
Mean low water.....	0.22 feet
Mean lower low water.....	0.00 feet
Lowest observed water level....	-4.07 feet

Add 1.88 feet to the tide table elevations to get the elevation in National Geodetic Vertical Datum.

The average depth of frost penetration is about 15 inches while the depth of extreme frost penetration is about 40 inches. Surface water drainage will flow directly into the Upper Bay.

2.4.2 GROUND WATER

A small amount of ground water may exist in an unconfined condition within the coarse-grained fill and underlying sands and gravels. The saturated, permeable portions of these units are not thick enough to provide significant quantities of ground water to pumping.

Ground water table in the unconsolidated sediments is near the surface, between 4 to 8 feet in depth, within the dredged sands. Ground water movement at the site is toward points of discharge, which would be any area near the perimeter of the island on the Hudson or East Rivers.

Ground water is contained in and moves through several differentiated geologic units composed of unconsolidated gravel, sand and clay of Late Cretaceous and Pleistocene Age. The underlying crystalline basement rocks are of Precambrian age and are not water-bearing.

2.5 ENDANGERED SPECIES

The information provided for this site was compiled from the U.S. Fish and Wildlife Service (USFWS) and the New York State Department of Environmental Conservation (NYSDEC).

The USFWS and NYSDEC reported that except for occasional transient individuals, no federally or state-listed species are known to occur on Governors Island.

No additional information on the occurrence of rare or endangered species or natural communities is known at this time. This does not mean that other state or federally-listed species may not be present within the areas of interest. An on site inspection by appropriate state and federal personnel may be necessary to verify the presence, absence or location of listed species, or natural communities.

2.6 DEMOGRAPHICS

2.6.1 CENTER OF ACTIVITY

Governors Island is located between Brooklyn Borough and Manhattan Borough in New York County, New York City, New York.

2.6.2 POPULATION DENSITY

CITY/COUNTY	AREA (sq.mi.)	POPULATION	POP.DENSITY
Manhattan Borough	28.4	1,487,536	52,378
Brooklyn Borough	81.8	2,300,664	28,125.5
New York County	28	1,487,536	53,126.3
Kings County	71	2,300,664	32,403.7
New York City	308.9	7,322,564	23,705.3

2.6.3 TYPES OF BUSINESSES AND INDUSTRY

The number of business establishments in New York County can be broken down by type as follows: manufacturing 7.1%; trade 30.5%; services and financial 56.1%; and other 4.9%. Of the people in the county employed by businesses, approximately 1.4% are unclassified. The number of business establishments in Kings County can be broken down by type as follows: manufacturing 8.1%; trade 35.6%; services and financial 42.5%; agriculture .4%; and other 11.7%. Of the people in the county employed by businesses, approximately 1.7% are unclassified. All foregoing percentages are from mid-March 1992.

2.6.4 TYPES OF HOUSING

Housing in Manhattan Borough and Brooklyn Borough is composed of both single family and multi-family dwellings. The median value of 128,037 specified owner-occupied housing units in Manhattan Borough is \$487,300. The median value of 74,134 specified owner-occupied housing units in Brooklyn Borough is \$196,100.

2.6.5 NEW DEVELOPMENT IN THE AREA

New development in the area is both commercial and residential.

3.0 RECORDS REVIEWED

This Archives Search Report (ASR) compiles information obtained through historical research at various archives and records holding facilities, interviews with individuals associated with the site or its operations, and personal visits to the site. All efforts were directed towards determining types of munitions used at the site, possible disposal areas, and any unknown training areas. Information obtained during this process was used in developing recommendations for further actions at the site.

Below is a listing of the repositories visited, records searched, and documents pertaining to Governors Island. Denoted in parentheses after the description of each document is that reference's citation as it is used in the report and APPENDIX A.

3.1 NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

3.1.1 NATIONAL ARCHIVES I--WASHINGTON DC 700 PENNSYLVANIA AVE., NW WASHINGTON, D. C. 20408-0001 (202) 501-5400

Record Group 77: Chief of Engineers

Entry 64: Letters Received, 1871-86

Box 64: 1884: 556-642

File: 611

1. Report of operations at the U. S. Mastic Works, Governors Island. (U. S. Mastic Works, 1884)

Box 68: 1885: 206-410

File: 280

1. Description of Governors Island, dated 20 March 1885. (U. S. Engineer Office, New York City 1885)

Box 72: 1885: 839-936

File 862

1. "Defenses of Governors Island, New York Harbor." (Gillespie 1885)

Entry 76: Letters Received, 1886-87

Box 3: 1886: 276-484

File: 324

1. Description of Fort Columbus, 20 August 1886.
(Newton 1886)

File: 386

1. "Defenses of Governors Island, N.Y. Harbor for the
Month of August 1886." (Governors Island 1886)

Entry 87: Letters Received, 1888-89

Researchers found several letters concerning Governors Island,
but none of them contained new information.

Entry 391: Construction Completion Reports

Box 140-141: Fort Jay

Nothing of value.

Entry 393: Historical Record of Buildings at Active Posts

Box 39: No file on Fort Columbus.

Box 72: No file on Governors Island.

Box 102

File: Fort Jay (1 of 7)

1. Building List. (Fort Jay n.d.)
2. Building List, dated 11 May 1943. (Fort Jay 1943)
3. "Annual Report of Construction and Repair," (War
Department 1939)

File: Fort Jay (2 of 7)

1. Inventory for Building T-20, Ammunition Vault,
completed February 1937. (War Department 1937b)
2. Inventory for Building T-24, Ammunition Vault,
completed February 1937. (War Department 1937c)
3. Inventory for Building T-26, Ammunition Vault,
completed February 1937. (War Department 1937d)

File: Fort Jay (3 of 7)

1. Map of Governors Island, revised 01 September 1928. (n.a. 1928)
2. Inventory of Building 76, Magazine, last revision February 1940. (War Department 1940)
3. Two aerial photographs of Governors Island. (Not referenced in Appendix A)

File: Fort Jay (4 of 7)

1. Inventory for Building 100, last revision 19 July 1938. (War Department 1938)
2. Inventory for Building T-92, April 1941. (War Department 1941)

File: Fort Jay (6 of 7)

1. Inventory for Building T-B-15, Warehouse Ordnance, dated May 1935. (War Department 1935)

File: Fort Jay (7 of 7)

1. Four aerial photographs of Governors Island. (Not referenced in Appendix A)

Entry 394: Historical Record of Buildings at Abandoned Post
Box 5: No Fort Columbus.
Box 10: No Fort Jay.

Entry 1007: Harbor Defense--Geographic Files, Formerly Classified 1918-45
Box 84

File: 660 (NY Harbor, Defenses of)

1. Map of Governors Island, revised 23 May 1921. (n.a. 1921a)
2. Map of Governors Island, dated 28 November 1921. (n.a. 1921b)
3. Map of Governors Island, dated 28 November 1921. (n.a. 1921c)

Entry 1009: Harbor Defense--Geographic Files, 1918-45

Box 93

File: 660.282

1. Description of "Emergency Project for Anti-Aircraft Defense of New York City," dated 15 June 1918.
(n.a. 1918)
2. First Indorsement from the New York General Supply Ordnance Depot to the District Engineer, dated 28 June 1918, regarding the shipment of anti-aircraft guns. (New York General Supply Ordnance Depot 1918)
3. Correspondence from the Chief of Engineers to the New York District Engineers, dated 12 September 1918, regarding anti-aircraft guns. (Chief of Engineers 1918b)
4. Correspondence from the District Engineer, Second District, New York to the Chief of Engineers, dated 29 November 1918, regarding anti-aircraft guns. (District Engineer, Second District, New York 1918a)
5. Second indorsement from the District Engineer to the Chief of Engineers, dated 13 December 1918, regarding anti-aircraft gun emplacements. (District Engineer, Second District, New York 1918b)

File: 660.283

1. Correspondence from the Chief of Engineers to the New York District Engineer, dated 26 July 1918, regarding anti-aircraft. (Chief of Engineers 1918a)

Record Group 92: Records of Quartermaster General

Entry 1891: Geographic File

Box 702

File: 600.1 Governors Island 1934

1. "Cross Index" of correspondence to the Adjutant General, dated 08 January 1935, concerning the use of Castle Williams when the Disciplinary Barracks leaves.
(n.a. 1935)

2. Correspondence from Planning Branch to Real Estate Branch, dated 19 December 1934, regarding construction on the east end of Governors Island. (Planning Branch 1934)

Box 703

File: 601.1 Governors Island, NY

1. Map: "Fort Jay, Governors Island, N.Y.," last correction 27 April 1918. (Stone 1918)

Box 951

File: 600.1 Fort Jay 1923

1. Correspondence from the Second Corps Area Quartermaster to the Commander, Second Corps Area, dated 29 March 1923, concerning new construction for fiscal year 1924. (Second Corps Area Quartermaster 1923)

File: 600.1 Fort Jay Layout New Construction 1933

1. "Report of Revision of Lay-Out Plan, New Construction, Governors Island, N. Y.," dated 15 August 1933. (Headquarters, Second Corps Area 1933)

Box 957

File: 633 Ft. Jay 1923-28

1. "Requisition for Construction Supplies" for a powder magazine, dated 30 June 1924. (Quartermaster, Second Corps Area 1924)

Entry 1998: Real Estate File

Box 120: Nothing of value on Ft. Jay

Box 526: Garden City to Hancock, NY

Five files on Governors Island, but nothing of value.

Record Group 153: Judge Adjutant General

Entry 56, Subseries 1: Reservation File 1800-1950

Box 286: New York

No files on Fort Jay or Governors Island.

Record Group 156: Records of Chief of Ordnance

Entry 28: General Correspondence, 1894-1913

Box 1686

File: 29955

1. "Floor Space of Storehouses," dated 03 July 1901.
(New York Arsenal 1901a)
2. "Disposition to be Made of Stores," dated 26 July 1901. (New York Arsenal 1901b)
3. Correspondence from the New York Arsenal to the Chief of Ordnance, dated 23 February 1905, concerning .30 caliber ammunition. (New York Arsenal 1905)
4. Correspondence from the Chief of Ordnance to the New York Arsenal, dated 06 February 1906, about .30 caliber ammunition at the arsenal. (Office of the Chief of Ordnance 1906a)
5. Correspondence from the Chief of Ordnance to the New York Arsenal, dated 31 October 1909, regarding small arms primers. (Office of the Chief of Ordnance 1906b)

Box 1687

File: 29955

1. Correspondence from the Chief of Ordnance to the New York Arsenal, dated 02 November 1901, listing the cost prices of rapid fire guns and other ordnance material. (Office of the Chief of Ordnance 1901)
2. Correspondence from the New York Arsenal to the Chief of Ordnance, dated 30 December 1901, reporting the amount of ordnance at the arsenal. (New York Arsenal 1901c)
3. Correspondence from the Chief of Ordnance to the New York Arsenal, dated 19 November 1909, inquiring about the quantity of .30 caliber ball ammunition at the arsenal. (Office of the Chief of Ordnance 1909)

Entry 29: General Correspondence, 1910-15

Box 2

Nothing useful filed under small arms.

Box 55

Files on Civil Service at NY Arsenal--nothing useful.

Box 110

Files on the Department of the East, which had its headquarters at Governors Island, but nothing useful.

Box 211

File: 29955

1. Correspondence from the New York Arsenal to Chief of Ordnance, dated 01 September 1914, concerning the disposition of certain ordnance stores. (New York Arsenal 1914)

Boxes 212-213

Nothing useful on Governors Island.

Record Group 175: Records of the Chemical Warfare Service

Entry 1: Central Decimal Files, 1918-1942

Box 172

1. Document 400/264, 3-3-42: Report of Non-controlled items submitted by the 41st Ordnance Battalion, Fort Jay. (Headquarters, 41st Ordnance Battalion 1942)

Box 221

1. Document 400.312/403, 11-18-41: Correspondence from Second Corps Area Chemical Office to the Chief of Chemical Warfare Service, dated 18 November 1941, regarding a CWS Requisition. (Second Corps Area Chemical Officer 1941)
2. Document 400.312/436, 11-24-41: Requisition from the Second Corps Area Chemical Officer for a instructional gas ID set. (Second Corps Area Chemical Officer 1941)

Box 227

1. Document 400.312/1835, 6-26-42: Requisition for instructional gas ID sets for classes taught in the New York City area. (Second Corps Area Chemical Officer 1942)

Box 229

1. Document 400.312/2373, 8-26-42: Correspondence from the Chief of Chemical Warfare Service to the Edgewood Chemical Warfare Depot, dated 26 August 1942, authorizing a CWS shipment to Fort Jay. (Office of the Chief, Chemical Warfare Service 1942)

Box 298

1. Document 471/177, 4-22-42: Report of CWS items used in demonstration for the First Army. (Maling 1942)

Box 355

1. Document 400.312/1102, 2-18-39: Approved requisition for Fort Jay. (Headquarters, Second Corps Area 1939a)
2. Document 400.312/1214, 7-20-39: Approved requisition for Fort Jay. (Headquarters, Second Corps Area 1939b)

Entry 2: Index Briefs to the Correspondence in Entry 1.

Box 241

File: Fort Jay (n.a. n.d.e)

Box 264

File: Governors Island (n.a. n.d.f)

Record Group 177: Records of the Chief of Arms

Entry 33: Index to correspondence, 1917-44

Boxes 161-163: Contain index cards for all post, camps, and stations in the correspondence file. One reference on Fort Jay, but it was only about the disciplinary barracks' move to Fort Leavenworth, KS.

Record Group 407: Records of the Adjutant General's Office

Entry: Central Decimal Files, Project Files, 1917-25

Box 1179

File: Govrs. Isl. NY 569.14

1. Memorandum for the Chief of Staff, dated 22 December 1924, regarding the reversion of Governors Island. (War Department General Staff 1924)

Box 1192

File: Reestablishment of Atlantic Branch, U. S. Disciplinary Barracks at Fort Jay, NY

1. Correspondence from the Adjutant General's Office to the Assistant Chief of Staff, dated 10 May 1922, concerning the disciplinary barracks at Castle Williams. (Adjutant General's Office 1922)

Entry 802: US Disciplinary Barracks, Atlantic Division, Annual Reports

Box 1

File: Annual Report 1923

1. "Annual Report of the Atlantic Branch, U. S. Disciplinary Barracks, Governors Island, New York, June 30, 1923." (Atlantic Branch, U. S. Disciplinary Barracks 1923)

Box 2

1. Final Report of the Atlantic Branch, U. S. Disciplinary Barracks, Governors Island, New York--Nov. 6, 1940. (U. S. Disciplinary Barracks 1940)

Entry 803: Records of US Disciplinary Barracks, Atlantic Division, General Orders, 1923-40

One Box: Nothing of value.

Entry 804: Records of US Disciplinary Barracks, Atlantic Division, Special Orders and Memoranda

One Box: Nothing of value.

3.1.2 NATIONAL ARCHIVES II--COLLEGE PARK
8601 ADELPHI ROAD, MD
COLLEGE PARK, MD 20740-6001
(301) 713-6800

3.1.2.1 TEXTUAL REFERENCE BRANCH

Record Group 77: Records of the Chief of Engineers

Entry 1011: Security-Classified Subject Files, 1940-45

Box 435: Gopher Ordnance Works to Gowen Field

No file on Governors Island

Box 504: Japan to Jefferson Barracks

No file on Fort Jay

Record Group 92: Records of the Quartermaster General

Entry 1892A: Geographic File, 1936-45

Box 176: Golden Gate to Grafton

Nothing useful on Governors Island.

Box 212: Jacksonville to Fort Jay

Nothing of value on the fort.

Box 213: Fort Jay to Jefferson Barracks

Nothing of value on Fort Jay.

Entry 1892B: Geographic File, 1946-48

Box 146: Fort Gibson to Fort McPherson

No information on Governors Island or Fort Jay.

Box 196: Java to Jefferson Barracks

No information on Fort Jay.

Record Group 338: Records of U. S. Army Commands 1942-

Entry: Second Service Command, Organization Histories 1939-45

Boxes 1-4

Nothing useful on Governors Island.

Entry: Second Service Command, Adjutant General's Office, Decimal Files, 1935-46

Boxes 2-9

Nothing of value on Governors Island.

Entry: Second Service Command, Adjutant General's Office, Classified Decimal File, 1940-43

Box 10

Nothing useful on Fort Jay.

Entry: Second Service Command, Adjutant General's Office, General Orders, 1926-45

Box 11

Nothing useful on the island.

Entry: Second Service Command, Adjutant General's Office, Circulars, Memos, Directives, 1940-46

Box 15

Nothing of value on Governors Island.

Entry: Second Service Command, Engineer's Office, 1929-44

Boxes 21-23

Nothing useful on the site.

Entry: Second Service Command, Ordnance Officer, 1944-46

Box 32

Nothing of value on the island.

Entry: Second Service Command, Military Training Division, Decimal File, 1941-45

Box 33-35

Nothing of value concerning the site.

Box 36: 352-353

File: Report of Chemical Warfare Activities May, June 1944

1. "Report of Chemical Warfare Activities, Second Service Command, for the months of May and June 1944." (Army Service Forces 1944)

File: 353 Training Aids-General

1. "List of Training Aids as reported at various installations . . .," dated 23 October 1943. (n.a. 1943)

Box 37

Nothing useful on Governors Island

Entry: First U. S. Army, Adjutant General Section

Boxes 54-55; 87-91; 124-125

Nothing useful in these general correspondence boxes.

Entry: Eastern Defense Command

Boxes 15-32

Nothing useful in these general correspondence files.

3.1.2.2 CARTOGRAPHIC BRANCH

Record Group 77: Records of the Chief of Engineers

Fortifications File

Drawer 37

Sheet 55: Map of Governors Island, 1867. (Corps of Engineers 1867)

Drawer 250

Sheet 1-18: "Armament Sketch, Fort Columbus, New York," dated 31 December 1898. (Corps of Engineers 1898)

Sheet 2-1: "Castle Williams," 1865. (n.a. 1865)

Sheet 2-9: "Armament Return" for Castle Williams, 1893. (Engineer Office, U. S. Army, New York 1893)

Sheet 3-8: "Armament Sketch, South Battery," 1896. (Corps of Engineers 1896)

Sheet 3-16: "Armament Sketch, Forts on Governors Island, New York," dated 31 December 1900. (Corps of Engineers 1900)

3.1.2.3 STILL PICTURES BRANCH

Record Group 373: Records of the Defense Intelligence Agency
Aerial Photographs from 1944, 1953, and 1962 covering Governors Island
were acquired from this branch.

**3.1.3 WASHINGTON NATIONAL RECORDS CENTER
4205 SUITLAND ROAD
SUITLAND, MD 20409-0002
(301) 457-7000**

After reviewing finding aids, no records were requested concerning Governors Island.

**3.1.4 NATIONAL PERSONNEL RECORDS CENTER
MILITARY PERSONNEL RECORDS
9700 PAGE AVENUE
ST. LOUIS, MO 63132-5100
(314) 538-4085**

Record Group 338: Records of U. S. Army Continental Commands, 1942-
Accession: 338-56Y-4084
One box containing tax exemption sheets, personnel authorization
files, management surveys, and cost ledgers.

Accession: 338-56Z-4084
One box concerning the Recruiting Publicity Bureau.

Accession: 338-57N-0037
Two boxes of personnel information.

Accession: 338-57O-0037
One box concerning the wage board and prisoner rosters.

Accession: 338-57S-0037
Three boxes from the Recruiting Publicity Bureau.

Accession: 338-57T-0037
One box of recruiting journals.

Accession: 338-57U-0037

Box 1 of 7

File: Army Life 1944

1. "WACS in Manahatas and Pagganck," by Fred Methot, *Army Life*, vol. 26 no. 8, August 1944. (Methot 1944)

Remaining six boxes contained recruiting posters and pamphlets.

Accession: 338-57A-3271

Six boxes of travel requests and vouchers.

Accession: 338-57C-6145

One box of EKG's, personnel actions, and operational planning files.

Accession: 338-58B-5053

One box of accident reports, wage schedules, and prison records.

Accession: 338-58D-5053

One box concerning personnel and management.

Accession: 338-58F-5053

Two boxes with recruitment information.

Accession: 338-58G-5053

One box with leader's guides, fact sheets, posters and WAC information.

Accession: 338-59B-4080

Box 2 of 3

File: 471 Ammunition 1955

1. Correspondence from the Post Adjutant's Office to the Commanding General, First Army, regarding chemical ammunition. (Post Adjutant's Office 1955).

Boxes 1 and 3 did not contain any useful information.

Accession: 338-59D-4080

One box of correspondence arranged according to the decimal classification system.

Accession: 338-59E-4080

One box of correspondence arranged according to the decimal classification system.

Accession: 338-59F-4080

One box concerning management improvement, personnel authorization files, and other material related to personnel and management.

Accession: 338A-59G-4080

One box of recruiting posters.

Accession: 338-60D-4076

One box containing information on the comptroller's activity, the West Point Review Board, and contracts.

Accession: 338-61H-3248

One box concerning the West Point Examining Board, civilian personnel, and logistics.

Accession: 338-61J-3169

Box 1 of 1

File: Daily Bulletins

1. Daily Bulletin no. 209, 25 October 1957.
(Headquarters, Fort Jay 1957)

Accession: 338-61K-3169

One box of general administration information.

Accession: 338-61L-3169

One box of prisoner rosters, funding information, and expenditures.

Accession: 338-61N-3169

One box of personnel information.

Accession: 338-61O-3169

Three boxes of recruiting publications and posters.

Accession: 338-61H-3248

One box concerning the West Point Examining Board, civilian personnel, and logistics.

Accession: 338-62D-0082

Box 1: Special Orders, First Army Newspapers, and Bulletins

Box 2

File: Fort Jay-Memorandums, 1958

1. Memorandum Number 10: Fort Jay Outdoor Pistol Range. (Headquarters, Fort Jay 1958)

Accession: 338-62E-0082

One box of general information concerning Governors Island.

Accession: 338-62F-0082

Five boxes of promotional material of the Recruiting Publicity Bureau.

Accession: 338-62G-0082

Box 1 of 1

File: SOP for RPC

1. Standard Operating Procedure for the Recruiting Publicity Bureau, stationed at Governors Island, 1958. (Recruiting Publicity Bureau 1958)

Accession: 38-62D-5102

One box of correspondence filed by the decimal classification system.

Accession: 338-63N-5042

One box containing management improvement information and personnel vouchers.

Accession: 338-64A-3223

One box of material consisting of court martials, special orders, memoranda, and general orders.

Accession: 338-64C-3223

Box 1 of 1

File: EOD Incident Reports 1960.

1. EOD Monthly Activity Report for December 1960. (542nd Ordnance Detachment 1960)

Accession: 338-65G-3249

One box of material consisting of court martials, special orders, memoranda, and general orders.

Accession: 338-66A-6121

One box containing management study information.

Accession: 338-66C-6121

Box 1 of 1

File: EOD Monthly Activity Report Files

1. Monthly Report for April 1962 for 542nd Ordnance Detachment. (542nd Ordnance Detachment 1962a)

2. Monthly Report for May 1962 for 542nd Ordnance Detachment. (542nd Ordnance Detachment 1962c)

File: Unexploded Ordnance Report Files

1. Incident Report no. 342-230-62, dated 30 April 1962. (542nd Ordnance Detachment 1962b)

2. Incident Report no. 542-252-62, 10 May 1962. (542nd Ordnance Detachment 1962d)

3. Incident Report no. 542-266-62, 15 May 1962. (542nd Ordnance Detachment 1962e)

Accession: 338-66D-6121

Box 1 of 1

File: UXO Incident Report Files 4 of 5

1. Incident Report no. 542/425/63, 26 August 1963. (542nd Ordnance Detachment 1963)

File: Monthly Activity Report FUSA EOD Units

1. EOD Monthly Activity Report for 01-31 January 1964. (542nd Ordnance Detachment 1964a)

File: Incident Reports FUSA EOD Oct 1964

1. Incident Report no. 542-10-639. (542nd Ordnance Detachment 1964b)

File: Monthly Activity Report FUSA EOD Oct 64
1. Monthly Activity Report for 01-31 October 1964.
(542nd Ordnance Detachment 1964c)

Accession: 338-67A-6068

Box 1 of 1

File: Transfer of Fort Jay to USCG

1. Real Estate Disposal Report No. 208. (Department of
the Army 1965)

Accession: 338-67A-6069

One box of financial information.

Accession: 338-68P-3100

Box 1 of 1

File: 461 Daily Bulletin 1956

1. Request for publication in Daily Bulletin regarding the
placement of Chemical Battalion plaque. (HQ, Sp Trps
1956)

Accession: 338-68Q-3100

One box containing management study information.

Accession: 338-68R-3100

One box filed by the Recruiting Publicity Bureau containing
recruitment pamphlets and posters.

**3.1.5 NATIONAL ARCHIVES-NORTHEAST REGION
 201 VARICK STREET
 NEW YORK, NY 10014
 (212) 337-1300**

Record Group 26: Records of the U. S. Coast Guard

Nothing from this record group were reviewed after consulting the finding
aid.

Record Group 77: Records of the Chief of Engineers

Entry 802

Box 24: New York City, Governors Island, 1907-30

1. Correspondence to the Chief of Engineers, dated 02 February 1909, concerning the construction of an embankment at Governors Island. (U. S. Engineer Office, New York City 1909).

Box 25: New York City, Governors Island, 1907-30

1. Correspondence authorizing construction of Quartermaster warehouses at Governors Island. (Depot Quartermaster 1917)
2. "Sketch of Governors Island showing location of piles for mooring purposes," dated 14 September 1917. (Office of the Depot Quartermaster 1917)

Entry 809: Letters Sent Relating to Governors Island.

Two Bound volumes

No useful information on Governors Island.

Record Group 156: Records of the Chief of Ordnance

Entry: Records of Arsenal and Armories

Box 1: NY Arsenal, Governors Island: Letters Received, Inspector of Cannons and Projectiles, Feb-Oct 1865.

Nothing useful on Governors Island.

Entry 1264: Inspection Letter Book

Nothing useful on Governors Island.

Entry 1322: Letters Received, August 1859

No useful information on Governors Island.

Record Group 392: Records of the U. S. Army Coast Artillery Districts and Defenses, 1901-42

Entry: Unnumbered Memorandums

Nothing useful on Governors Island.

Entry 30: Report of Gas Proofing of Harbor Defenses of Southern New York

Nothing on Governors Island.

Entry 123: Harbor Defenses of Eastern New York, 1901-28

Box 1: Letters and Endorsements Sent 1901-04

No useful information on Governors Island

Entry 124: General Correspondence, 1917-1922

Boxes 1-14

Nothing useful on Governors Island.

Entry 125: General and Special Orders, Circulars and Memorandums,
1910-11

Nothing on Governors Island.

Entry 126: General Orders 1917-21

No useful information on Governors Island.

Entry 127: Special Orders, 1914-23

Nothing useful on Governors Island.

Entry 128: General Orders, 1921, 1938-39

No useful information on Governors Island.

Entry 129: Bulletins, 1914

Nothing useful on Governors Island.

Entry: Letters Sent May-July 1906

No useful information on Governors Island.

Entry: Letters Received, June 1901-July 1906

Nothing useful on Governors Island.

Record Group 407: Records of the Adjutant General's Office, 1917-

Entry: Records of the Recruiting Publicity Bureau at Governors Island

Boxes 1-2

Nothing useful on Governors Island.

3.1.6 FEDERAL RECORDS CENTER-NEW YORK
BUILDING 22
MILITARY OCEAN TERMINAL
BAYONNE, NJ 07002
(201) 823-7161

Record Group 26: Records of the U. S. Coast Guard
St. Louis District researchers reviewed the finding aids concerning this record group, and all of the files at the FRC deal with Coast Guard cutters and other stations. No boxes were pulled that pertained to the station at Governors Island.

Record Group 77: Records of the Chief of Engineers
Accession: 77-62A414: Civil and Military Projects
Nothing useful on Governors Island.

Accession 77-69A-122: Real Estate and Military Construction
Nothing useful on Governors Island.

Record Group 291: Records of the Federal Property Resource Service
Accession 291-72A-139: Property Disposal Files
No files on Governors Island.

Accession 291-73A1570: Property Disposal Files
The file on Governors Island contained nothing useful.

3.2 MILITARY ARCHIVES, LIBRARIES, AND INFORMATION SOURCES

3.2.1 U. S. ARMY CENTER OF MILITARY HISTORY
1099 14TH STREET, NW
WASHINGTON, D. C. 20005-3402
(202) 761-5416

1. *Guarding America's Front Door: Harbor Forts in the Defense of New York City*
by Russell S. Gilmore. Published by the Fort Hamilton Historical Society, 1983.
(Gilmore 1983)

**3.2.2 U. S. ARMY CORPS OF ENGINEERS
OFFICE OF HISTORY
7701 TELEGRAPH ROAD
ALEXANDRIA, VA 22310-3865
(202) 355-3558**

1. *Military Reservations* (1937). A sketch of Fort Jay's location, area, history, and easements. (War Department 1937a)
2. Real Estate Description of Fort Jay, dated 28 August 1967. Real Estate Box 7; File: 1504-07 New York Ret. WNRC. (n.a. 1967b)

**3.2.3 U. S. ARMY MILITARY HISTORY INSTITUTE
CARLISLE BARRACKS
CARLISLE, PA 17013-5008
(717) 245-3601**

3.2.3.1 LIBRARY

The library contained several different general histories of Governors Island. Several of these books were obtained through interlibrary loan.

3.2.3.2 ARCHIVES

This branch of the MHI did not have any useful material on Governors Island.

3.2.3.3 STILL PICTURES BRANCH

Record Group 97S: Forts, Miscellaneous

Ft. Jay, Governors Island

Green Oversize Album, Numbers 63 - 69

Several aerial photographs from 1917-1961 were reviewed here and several were purchased for use in this document. Copies of Numbers 65 - 69 are located in APPENDIX E and copies of 63 and 64 are located in the REPORT PLATES section.

**3.2.4 U. S. ARMY CHEMICAL AND BIOLOGICAL DEFENSE AGENCY
HISTORICAL DIVISION
BUILDING E5183
ABERDEEN PROVING GROUND, MD 21010-5423
(410) 671-4430**

1. Photograph of nurses wearing gas masks on Governors Island with New York City in the background. (*CWS Newsletter* 1941)
2. *Guide to Army Posts in the United States* by the Army Times, 1966. (Army Times 1966)

**3.2.5 U. S. ARMY ENVIRONMENTAL CENTER
TECHNICAL INFORMATION CENTER
EDGEWOOD AREA TRAILER 4464-2T
ABERDEEN PROVING GROUND, MD 21010
(410) 679-7878**

The Army Environmental Center has not conducted any work at Governors Island; consequently, there was no information here.

**3.2.6 HARBOR DEFENSE MUSEUM
FORT HAMILTON
BROOKLYN, NY 11252
(718) 630-4306**

Vertical File Titles:

Governors Island, Bibliography
Governors Island, Brochures, Pamphlets, etc.
Governors Island, Castle Williams
Governors Island, Histories and Historical Notes
Governors Island, Maps
Governors Island, Photos and Xeroxes

Nothing useful or original in any of these files.

**3.2.7 HEADQUARTERS, FIRST U. S. ARMY
FORT GILLEM, GA
(404) 362-7527**

3.2.7.1 DC-SOPS OFFICE

Historical Files, First U. S. Army:

Box 4: Historical Files on 98th Division, Rochester, NY; 108th Division, Winston-Salem, NC; and First Army Organization History

1. *First U. S. Army from 1918-1980.* (n.a. n.d.g)

2. *History of the First United States Army: The Demobilization Period, 09 May 1945 to 30 June 1948.* (Historical Section, First U. S. Army 1948)

Box 6: Organization Historical Files, 1923-1982, Lineage and Honors

Box 7: Historical Files on Units, FY78

Box 8: Organizational Historical Files FUSA ARCOMS 1974-87

Box 9: Files from Fort Meade--1960's and 1970's

3.2.7.2 PUBLIC AFFAIRS OFFICE

1. *Governors Island.* (First U. S. Army n.d.)

3.3 U. S. COAST GUARD SOURCES

3.3.1 U. S. COAST GUARD STATION, GOVERNORS ISLAND, NY

3.3.1.1 REALIGNMENT AND CLOSURE EXECUTION TEAM ROOM

1. Brochure: "Welcome to Governors Island." (U. S. Coast Guard n.d.b)

2. Newspaper Article: "Civil War shell prompts quick action aboard Governors Is," by PA2 Dave Silva. *First Word*, c.1993. (Silva 1993)

3. "Historic Structures Inventory and Documentation Project, Governors Island."

By Sally Kress Tompkins, Program Manager, National Park Service. Undertaken for the Third Coast Guard District, Governors Island, New York, 1982, 1983, 1985. (National Park Service 1985)

4. Sketch Drawing of Governors Island, dated 27 April 1876. (n.a. 1876)
5. "United States Coast Guard Governors Island Historic Building Inventory." (U. S. Coast Guard n.d.c)
6. Photograph of the open storage area filled with cannon balls. (n.a. n.d.c)
7. "HABS/HAER Inventory," for Buildings 26, 104, 105, 107, 135, 298, and 928, dated Summer 1982. Compiled by the Department of the Interior. (Department of Interior 1982)
8. "HABS/HAER Inventory," for Fort Jay and Buildings 215, and 501-Castle Williams," dated Summer 1983. Compiled by the Department of the Interior. (Department of the Interior 1983)
9. "Archaeological Assessment of the Proposed Guest House Site, Third Coast Guard District, Governors Island, New York," dated April 1986. Compiled by The Cultural Resource Group, Louis Berger and Associates, Inc. for the Planning Office, Third Coast Guard District, Governors Island, New York. (The Cultural Resource Group, Louis Berger and Associates, Inc. 1986)
10. Program: "United States Coast Guard Support Center, New York, Disestablishment Ceremony and United States Coast Guard Closure Resident Office, Governors Island, Establishment Ceremony," dated 12 August 1996. Reprint of *Three Centuries Under Three Flags* with additions and re-editing by Kevin C. Miller, Public Affairs Specialist. (U. S. Coast Guard, Atlantic Area, Public Affairs Office 1996)
11. "National Register of Historic Places Inventory--Nomination Form," for Governors Island, New York. Compiled by the United States Department of the Interior, National Park Service. (National Park Service 1983)
12. "Phase IB Archaeological Survey for a Proposed Utility Trench, Governors Island, New York." Prepared by Cultural Resource Group, Louis Berger and Associates, Inc. for the United States Coast Guard, dated November 1987. (The Cultural Resource Group, Louis Berger and Associates, Inc. 1987)

13. Sketch of Governors Island, undated. (n.a. n.d.d)
14. "Plan of Magazine, Fort Jay, NY." (Department of the Interior n.d.)
15. "Historic Structures Inventory, Governors Island, New York: Volume I." Prepared by the National Park Service for the Third Coast Guard District. (National Park Service n.d.)
16. "Enlargement of Governors Island, New York Harbor," dated 1912. Report of the Chief of Engineers. (Chief of Engineers 1912)

3.3.1.2 MAP ROOM, BUILDING 107

1. "Site Plan of Fort Jay, Governors Island, New York," dated May 1953. (First Army Engineer 1953)
2. Real estate acquisition map for Governors Island, corrected to the metes and bounds dated 13 January 1909. (Governors Island 1909)
3. "Site Plan: U. S. Coast Guard Support Center, New York," dated 01 September 1985. (n.a. 1985)
4. "Map of Governors Island-1879," drawn in 1962. Map Drawer: Historical 1879; Building 107; Governors Island, NY. (First U. S. Army Engineers 1962a)
5. "Map of Governors Island-1908," drawn in 1962. Map Drawer: Historical 1908; Building 107; Governors Island, NY. (First U. S. Army Engineers 1962b)
6. "Governors Island, New York, 1879," drawn in 1967. Map Drawer: Historical 1879; Building 107; Governors Island, NY. (U. S. Coast Guard, Third District 1967)
7. "Fort Jay, Governors Island, New York," revised 1958. Map Drawer: GI Maps and Utilities; Building 107; Governors Island, NY. (Office of the Post Engineer 1954)
8. "Seawall Repairs, New York Base, Governors Island, New York," dated 15 May 1969. (U. S. Coast Guard, Third District 1969)
9. "Governors Island, New York Harbor, New York," dated 26 February. (Construction Division, Office of the Quartermaster General 1939)

10. "Master Sewer Plan," dated 15 February 1950. (Post Engineer 1950)

**3.3.2 HEADQUARTERS, U. S. COAST GUARD
HISTORIAN'S OFFICE, COMMANDANT (G-CP-4)
2100 2ND STREET SW
WASHINGTON, DC 20593
(202) 267-2596**

This facility was contacted by phone and informed us that it contained only a few sources that had already been found elsewhere.

**3.4 NATIONAL AIR AND SPACE MUSEUM
SMITHSONIAN INSTITUTION
ARCHIVES DIVISION
WASHINGTON DC 20560
(202) 357-3133**

Aerial Photography from the U.S. Air Force pre-1954 Still Photo Collection was reviewed, and images from pre-1924, 1924, and 1934 were ordered. Copies of these photos are located in Appendix E--Historical Photographs.

**3.5 U. S. ARMY CORPS OF ENGINEERS-NEW YORK DISTRICT
REAL ESTATE DIVISION
26 FEDERAL PLAZA
ROOM 2007
NEW YORK, NY 10278-0090
(212) 264-4336**

Closed Historical Real Estate File, 5-30-95: Ft. Jay, NY

1. An article from *The Recruiting News*, dated 1926, by Chaplain Edmund Banks Smith. (Smith 1926)

2. "Realty Control File Summary," dated 02 August 1967. (n.a. 1967a)

3. "Real Estate Utilization Inspection Report," dated 26 August 1963. (Lustig 1963)

4. "Disposal Report No. 208," dated 30 June 1965. (Department of the Army 1965)

5. "List and Description of Buildings and Improvements, Fort Jay, Governors Island, New York." (n.a n.d.a)
6. "Historical Sketch" of Governors Island. (n.a. n.d.b)
7. "Site Plan: Fort Jay, Governors Island," dated 01 September 1964. (n.a. 1964)

3.6 LOCAL LIBRARIES AND HISTORICAL SOCIETIES

3.6.1 NEW YORK PUBLIC LIBRARY MANUSCRIPTS AND ARCHIVES DIVISION 5TH AVENUE AND 42ND STREET NEW YORK, NY 10018 (212) 930-0801

1. "The Guardian in the Harbor," by Gerald R. Wolf. *The New Chronicle*, vol. 3, no. 1 (1990).
2. *The Encyclopedia of New York City* edited by Kenneth L. Jackson. Yale University Press, New Haven (1995), page 493. (Jackson 1995)
3. *The WPA Guide to New York City* by the Guilds Committee for the Federal Writer's Project. Random House, New York (1939, reprint 1992), pages 413-15. (Guilds Committee 1992)
4. *The Landmarks of New York II* by I. N. Phelps, 1928. Arno Press, New York (reprint 1967). (Phelps 1967)
5. *Governors Island, Its History and Development, 1637-1937* by Governors Island Club, 1937. (Governors Island Club 1937)
6. Clippings File, Governors Island: "U. S. Coast Guard Base, New York, Governors Island." (U. S. Coast Guard n.d.a)
7. Clippings File, Governors Island: "The Little Town in the Harbor" by Rebecca Morris. *New York News Magazine*, 25 July 1976. (Morris 1976)
8. Clippings File, Governors Island: "Governors Island." *Sunday News*, 31 October 1954. (*Sunday News* 1954)

9. Clippings File, Governors Island: "Peaceful Governors Isle on Army Hub" by Edward Ellis, 15 May 1962. (Ellis 1962)

10. Microfilm: "The Talk of the Town: And the real estate," *New Yorker*, 23 October 1995, pages 37-38. (*New Yorker* 1996)

11. Microfilm: "Real Estate: Fantasy Island," *New York*, 17 April 1995, pages 33-34.

12. Microfilm: "Post Coasties" by David France, *New York*, 09 September 1995, pages 30, 33.

**3.6.2 NEW YORK HISTORICAL SOCIETY
 MANUSCRIPT DEPARTMENT
 170 CENTRAL PARK WEST
 NEW YORK, NY 10024
 (212) 873-3400**

1. "Garrison Life at Governors Island," by W. H. Redeing. *Scribners Monthly*, February 1881, pages 593-602. (Redeing 1881)

2. "Governors Island," by Blanche Wilder Bellamy. Half Moon Series on Historic New York, 1897. (Bellamy 1897)

3. "Guide to Governors Island," prepared by the Staff of Base New York, 1973.

4. Notes on Governors Island, compiled by William Kelby.

5. "Knickerbocker Scrapbook: The islands of New York City," by Thelma E. Smith. Municipal Reference Library Notes, June 1962.

3.7 INFORMATION OBTAINED IN ST. LOUIS, MO

**3.7.1 INTERLIBRARY LOANS AND REFERENCE MATERIAL RETAINED BY THE
ST. LOUIS DISTRICT
1222 SPRUCE STREET
ST. LOUIS, MO 63103
(314) 331-8841**

1. *Handbook of Ordnance Data*, 1919. Contained a brief description of the New York Arsenal at Governors Island. (U. S. Army Ordnance Department 1919)
2. Interlibrary loan: *Three Centuries Under Three Flags: The Story of Governors Island from 1937* by Anastasio Carlos M. Azoy. Published by Headquarters, First Army, 1951. (Azoy 1951)
3. Interlibrary loan: *Governors Island: Its Military History Under Three Flags, 1637-1913*, by Edmund Banks Smith. Self-published in 1913. (Smith 1913)

**3.7.2 ST. LOUIS PUBLIC LIBRARY
1301 OLIVE STREET
ST. LOUIS, MO 63103
(314) 241-2288**

After consulting the indices to the *New York Times* from 1851-1996, one hundred-forty articles were reviewed, and the following list contains the most pertinent to this study.

1. "Sweeping Changes at Governors Island," 18 April 1902, pg. 2, col. 2. (*New York Times* 1902)
2. "Tramp of Sentries on Governors Island From 1756," 28 September 1913, sec. VI, pg. 7, col. 1. (*New York Times* 1913)
3. "Slash in Army Bill Brings Gloom Here," 01 April 1924, pg. 35, col. 1. (*New York Times* 1924)
4. "Airport or Army on Governors Island," 13 April 1924, sec. IV, pg. 12. (Mingos 1924)

5. "12 Injured in Fire on Governors Island," 13 July 1925, pg. 1, col. 6. (*New York Times* 1925)
6. "Huge Airport for New York is in Prospect," 06 December 1925, sec. IX, pg. 5, col. 1. (Mingos 1925)
7. "Would Create Airport on Governors Island," 29 January 1929, pg. 15, col. 7. (*New York Times* 1929)
8. "Relief in City Cost \$6,700,000 in March," 08 May 1932, sec II, pg. 3, col. 2. (*New York Times* 1932)
9. "Governors Island Has Building Boom," 26 November 1933, sec. II, pg. 3, col. 1. (*New York Times* 1933)
10. "Governors Island Fire Scare," 06 December 1934, pg. 46, col. 5. (*New York Times* 1934)
11. "160 Air Fields Fail to Meet New Rules," 20 April 1937, pg. 1, col. 2. (Lyman 1937)
12. "War By Gas Held The Most Humane," 12 June 1938, pg. 35, col. 1. (*New York Times* 1938)
13. "Brooklyn Navy Yard Will Close; Sweeping Cutbacks Include Ft. Jay and Army Terminal Here," 20 November 1964, pg. 1, col. 8. (Raymond 1964)
14. "Coast Guard Asks for Fort Jay Site," 18 February 1965, pg. 35, col. 1. (Kihss 1965)
15. "First Army Says Farewell to City: Program Marks End of Era at Fort Jay as Coast Guard prepares to move in," 01 January 1966, pg. 19, col. 8. (Johnston 1966)
16. "Authorities Destroy An Old Mortar Shell," 18 November 1993, pg. B5, col. 1. (Associated Press 1993)
17. "Governors I. Is Excavated After Discover," 04 June 1994, pg. 23, col. 1. (Sullivan 1994)

18. "Coast Guard Plan to Leave Governors I.," 17 October 1995, pg. B1, col. 8. (Van Natta Jr. 1995)

19. "Governors Island Historic District Created," 19 June 1996, pg. B2, col. 4. (Stout 1996)

3.8 AERIAL PHOTO SOURCES

3.8.1 U.S. ARMY MILITARY INSTITUTE

See Section 3.2.3.3--Still Pictures Branch for information.

3.8.2 DEFENSE INTELLIGENCE AGENCY (DIA)

See Section 3.1.2.3--National Archives II, College Park, Still Pictures Branch for information.

3.8.3 U.S. GEOLOGICAL SURVEY EROS DATA CENTER SIOUX FALLS, SD 57198 P.O.C.--CUSTOMER SERVICE (605) 594-6151

Photos ordered and analyzed are listed in Section 4.3.2--Aerial Photo Interpretation.

3.8.4 KEYSTONE AERIAL NE PHILADELPHIA P.O. BOX 21059 PHILADELPHIA, PA 19114 P.O.C.--PHOTO SALES (215) 677-3119

Photos ordered and analyzed are listed in Section 4.3.2--Aerial Photo Interpretation.

4.0 HISTORICAL ORDNANCE USAGE

4.1 GENERAL HISTORY OF GOVERNORS ISLAND

4.1.1 THE REVOLUTIONARY PERIOD

Governors Island's history as a fortification started in April 1776 when General Putman crossed from New York City to the island with 1000 men and constructed the initial earthen defenses. The island was manned one week later. The exact plan of the defenses is not known, but the island's armaments included four 32-pound and four 18-pound cannons along with 30 smaller pieces. After the works were completed, George Washington intimated: "Governor's Island is more strong [*sic*] and better guarded than any other post in the Army" (Azoy 1951: 22-23).

The British fleet tested the island's guns on 12 July 1776 when two frigates and a schooner tried to enter the Hudson River. After exchanging fire for an hour, in which the island's cannons fired close to two hundred rounds, the British ships retreated to safety, but according to reports, the frigate *Rose* suffered heavy damage. After witnessing the strength of the island's batteries, the British decided on a land assault, placing troops ashore on Long Island on 26 August. The British victory forced the Continental troops to withdraw from Governors Island. British troops occupied the island, maintaining its defenses, until the end of the Revolution. On 03 December 1783, the British officially surrendered the island to New York Governor George Clinton (Azoy 1951: 24-25, 29).

4.1.2 DEVELOPMENT OF THE FORTIFICATIONS

At this time, the island belonged to the State of New York, and no military presence existed there until war rumors began to circulate near the end of the century. In 1794, a temporary, earthen work once again was constructed. In 1800, New York gave the island to the federal government for defensive purposes, and in 1806, Governors Island began to take shape as a permanent installation. Fort Jay was taken down, and the construction of the permanent Fort Columbus commenced. When completed in 1809, the fort could accommodate 104 guns (National Park Service 1983).

While Fort Columbus is a very good representation of an older, more traditional fortress, Castle Williams was the prototype for a new era of defense system. Its design is circular and multi-tiered, and its guns were in casemates. When completed in 1811, the castle was the strongest defense fortification ever

constructed in America. It had the capacity for about 100 cannons mounted in its three tiers and *en barbette* (National Park Service 1983).

The island's contribution to the defense of New York City was completed by South Battery, a smaller defense work overlooking Buttermilk Channel. On the eve of the War of 1812, the island's defenses required one thousand officers and men to be fully operational (National Park Service n.d., Azoy 1951: 43).

In the opening weeks of the War of 1812, an old hulk of a ship was anchored between Castle Williams and its sister fort, Castle Clinton, located in Manhattan. For two hours the two forts poured shot into the ship with an accuracy rate higher than eighty percent. Cannon balls, heated prior to firing, set the ship ablaze (Azoy 1951: 42-43). This event, however, was the only hostile activity of the island during this conflict as the British never attempted an attack on New York City.

Governors Island fell into disrepair after the war, but in the early 1830's Congress began appropriating money for the upkeep of the island. At this time, both the fortifications and the island's living quarters were repaired and upgraded. In 1833, the Ordnance Department built the New York Arsenal on 6.5 acres of the island. In 1847, the arsenal expanded; it acquired additional land and built a new storehouse, a store yard, and offices (Azoy 1951: 51; National Park Service 1985).

4.1.3 CIVIL WAR AND GROWTH OF ADMINISTRATIVE FUNCTIONS

During the Civil War, Governors Island's defenses were maintained and kept ready, but since the Confederate Army never attempted an invasion of the city, the island contributed to the Union cause in a very different way. The island became a recruiting center, a supply depot, and a prison. The New York Arsenal was greatly stressed, forcing the Ordnance Department to rent additional space in New York City. The army converted Castle Williams into a military prison, housing as many as one thousand prisoners at a time (National Park Service 1985).

In 1871, the last defensive structures at Governors Island were proposed. The Barbette Battery was designed as a series of defense guns running along the west-southwest side of the island from Castle Williams to South Battery. These plans were abandoned, however, when the funding disappeared. The parapet had not been completed, and much of the emplacement was not even ready for the installation of the gun platforms. This area was later developed as officer's housing in the 1890's (The Cultural Resource Group, Louis Berger and Associates, Inc. 1986).

As the twentieth century approached, the island's active role in coastal defense shrank as its administrative importance increased. In 1878, an army reorganization placed the headquarters of the Division of the Atlantic at Governors Island. This division was divided into the Departments of the East and the South; the headquarters of the former joined the division's at Governors Island. In keeping with its status as a major headquarters, General Winfield Hancock improved the post's living quarters, removed dangerous buildings, established regular ferry service, installed outdoor lighting, and connected the island's water lines with those of the city (Azoy 1951: 69-70). Governors Island remained the location of major army commands through a series of restructuring moves well into the twentieth century (National Park Service 1985).

While the administrative importance of the base increased, the island itself had been shrinking. From the Dutch Colonial Period to the beginning of the twentieth century, constant assault by the tides reduced the island's size from approximately 160 acres to about seventy acres. In 1901, work began on a seawall outlining an area to be reclaimed from the harbor. Using dredged material and fill from New York City's Fourth Avenue subway, the island's size was increased to 173.35 acres at a cost of over a million dollars. This reclaimed land was initially used as a landing strip; several important flights in early aviation history involved Governors Island. In 1916 and 1917, a civilian group used the island to operate a school promoting the use of military aviation (First U. S. Army n.d.).

4.1.4 THE WORLD WARS

Eighteen minutes after Congress declared war on Germany on 06 April 1917, infantrymen from Governors Island set out in boats to seize the German merchant ships in the harbor. After this overt action, the island settled into its role as a site for troop embarkation and a supply base. During the war, much of the filled-in land was covered by warehouses. Moving the supplies required an eight-mile railroad on the island (U.S. Coast Guard, Atlantic Area, Public Affairs Office 1996: 44).

The years following World War I were a time of change for the island. In 1920, the New York Arsenal's activities moved to Raritan Arsenal in New Jersey. Moving the contents of the dozen arsenal buildings required 200 cars (n.a. n.d.b). Later in 1920, the War Department reorganized into nine corps areas, and the Headquarters of the Second Corps Area succeeded that of the Eastern Department of the Army. The following year, Castle Williams became the Eastern Branch of the United States Disciplinary Barracks. In the mid 1920's, a lack of funding allowed the facilities at Governors Island to deteriorate, but by the end of the decade, a

rejuvenation of the island had begun. New construction included the barracks building (current Building 400), designed to house an entire regiment; a new hospital; a headquarters building; a YMCA; a school; and non-commissioned officers' quarters. During the Great Depression, the Works Progress Administration did much of the renovating work (U. S. Coast Guard, Atlantic Area, Public Affairs Office 1996: 47-49; *New York Times* 1924, 1932, 1933).

During World War II, Governors Island once again played an important administrative role in the war effort. The Eastern Theater of Operations, the Second Service Command (replacing the Second Corps Area), and the First U. S. Army made their headquarters on the island. The Army also placed its main reception center for new inductees on the island. The headquarters for the First U. S. Army left for overseas action on 12 October 1943. The Eastern Defense Command (formerly the Eastern Theater of Operations) was discontinued on 01 March 1946, followed by the Second Service Command in July. The headquarters of the First U. S. Army returned to the island on 11 June 1946 (First U.S. Army n.d.)

4.1.5 THE TRANSFER TO THE COAST GUARD

There were no great changes or additions to the island after World War II, except some new housing and the ventilator shaft of the Brooklyn Battery Tunnel. In November 1964, the Department of Defense announced the combination of the First and Second U. S. Armies. This new First U. S. Army was to make Fort Meade, Maryland, its headquarters. The consolidation and the closure of the facility at Governors Island was expected to save the government fourteen million dollars annually. In 1965, the U. S. Coast Guard proposed to move onto Governors Island and consolidate many of its New York area activities (Raymond 1964; Department of the Army 1965; Kihss 1965).

4.1.6 THE COAST GUARD ERA

After the island changed hands in an official ceremony in 1966, the Coast Guard's Atlantic Area Command, the Third Coast Guard District, and the Captain of the Port/Group New York moved to Governors Island. The Coast Guard also moved its training center from Groton, Connecticut, to the island. The training center, capable of handling as many as one thousand students at a time, taught navigation, search and rescue actions, and ice patrol tactics. These moves made Governors Island the largest Coast Guard Base in the country, and all of the activity fell under the umbrella of the Coast Guard's Support Center, New York (Kihss 1965; U.S.

Coast Guard n.d.a). During the Coast Guard's occupation of the island, an Automated Merchant Vessel Reporting System, a computerized system for tracking as many as 10,000 ships, and the Rescue Coordination Center operated from the base (U. S. Coast Guard, Atlantic Area, Public Affairs Office 1996).

In October 1995, the Coast Guard announced its plans for the cessation of its operations at Governors Island. Coast Guard facilities in Bayonne, New Jersey; Staten Island, New York; Tidewater, Virginia, and Charleston, South Carolina, will assume the responsibilities of the closed base. The Coast Guard hopes to sell the island through the disposal agency, General Services Administration, by 01 October 1998. Releasing the property is expected to save the Coast Guard thirty million dollars a year (Van Natta Jr. 1995; U. S. Coast Guard, Atlantic Area, Public Affairs Office 1996).

4.2 ORDNANCE AND EXPLOSIVE/CHEMICAL WARFARE MATERIAL CONCERNS

4.2.1 FORTIFICATIONS

4.2.1.1 FORT JAY/COLUMBUS

The exact layout of the defense system erected by General Putman in 1776 is unknown, but it was probably located on the current site of Fort Jay since it is the island's highest point. The armament at the time consisted of thirty small pieces supporting four 32-pound and four 18-pound cannons (Azoy 1951: 22-25). When the permanent fortress, Fort Columbus, was completed, it housed about fifty cannons, but in the 1830's, the structure had forty-seven 42-pound, seventeen 30-pound, and twenty 25-pound cannons. These weapons were supported by eight cannonades and six mortars (Newton 1886). An annual report from 1885 listed the armament at Fort Columbus: five 15-inch guns, thirty-six 10-inch guns, and five 100-pound Parrott guns (U. S. Engineer Office, New York City 1885). Apparently, the armament at Fort Columbus did not change greatly for the rest of the century. An armament sketch for 1898 added three 8-inch converted rifles, and a sketch from 1900 revealed that three of the previously mounted Parrott guns were removed (Corps of Engineers 1898, 1900). It is not known when the weapons were removed from the island, but by the beginning of the twentieth century Fort Columbus served no active role in the defense of New York City.

4.2.1.2 CASTLE WILLIAMS

Construction ceased on Castle Williams in 1811. This structure was the first of its kind in American coastal defense with its multi-tiered, circular characteristics. The first two tiers were designed for cannons, and the third was to be a barracks. Both the third tier and the roof, however, could be converted to hold more weapons (National Park Service n.d.). Even before the structure was completed, eleven French 36-pound cannons had been mounted in it (Governors Island Club 1937). During the Civil War, while housing Confederate prisoners of war, the castle still contained twenty-one 42-pound smoothbore cannons, five 42-pound rifled guns, and five 15-inch smoothbore cannons (n.a. 1865). In 1885, the castle housed five 15-inch, four 8-inch, and twenty 32-pound guns (U. S. Engineer Office, New York City 1885). In 1893, the armament was essentially the same, but by 1900, the castle had been completely converted to a prison (Engineer Office, U. S. Army, New York 1893; Corps of Engineers 1900).

4.2.1.3 SOUTH BATTERY

Just before the War of 1812, South Battery was built overlooking Buttermilk Channel. Half-Moon Battery, as it was known at the time, initially was a single story, but a second level was added around the middle of the century. South Battery was equipped with eight 10-inch Rodmans as late as 1900 (National Park Service n.d.; Corps of Engineers 1900).

4.2.1.4 BARBETTE BATTERY

The last defensive fortification for Governors Island was the never-completed Barbette Battery. Designed to protect the southwest side of the island, running from Castle Williams to South Battery. A lack of funding halted the construction. According to the 1885 annual report, eight magazines had been completed; the parapet had not been finished, and no permanent gun platforms had been installed. There were, however, several temporary pieces in place at this time: two 12-pound guns and two howitzers. Four 8-inch cannons and a 13-inch mortar were set up for practice (U. S. Engineer Office, New York City 1885).

4.2.1.5 ANTI-AIRCRAFT MEASURES

During World War I, two 3-inch anti-aircraft guns were installed at Governors Island to protect the military facilities on the island as well as portions of

Manhattan and Brooklyn. The exact location of these guns on the island is not known (District Engineer, Second District, New York 1918a).

4.2.2 NEW YORK ARSENAL

For nearly a century, the Ordnance Department used a portion of Governors Island as the New York Arsenal. The exact date of the arsenal's creation is not known. It may have occupied existing buildings as early as 1822, but in 1833, Congress authorized new construction specifically for the New York Arsenal. All of the arsenal buildings were completed by 1900 (National Park Service n.d.). In 1867, the facilities included several ordnance storehouses, an ammunition storehouse, the commandant's quarters, stables, and several shot and storage areas (Corps of Engineers 1867).

In the 1880's, arsenal personnel were emptying "condemned pistol cartridges" and burning the powder. A spark was somehow taken back to the main pile causing an explosion, seriously injuring one man (Redeig 1881).

Following is a list of ordnance material being stored at the arsenal in 1901; these items were scheduled to be shipped to other military facilities throughout the country (New York Arsenal 1901a, 1901b):

- 5,500,000 .45-caliber ball cartridges
- 6,000,000 .30-caliber ball cartridges
- 175 8-inch cased shot
- 50 high explosive 8-inch shells
- 4,000 1.5-inch ammunition for Hotchkiss revolving gun
- 8 shells for 15-inch pneumatic dynamite gun
- 103 8-inch deck penetrating shot
- 133 12-inch armor piercing shot
- 700 8-inch chilled shot
- 4,448 6-pound gun ammunition
- 802 Saluting charges

In 1905, the New York Arsenal reported to the Chief of Ordnance that there were two million .30-caliber smooth bullets at the arsenal and all of its .30-caliber grooved bullets had been issued. Also, attached to this correspondence is the following list of various shot and shell:

- 49,228 12-pound shot
- 19,883 12-pound shell
- 1,087 24-pound shot

19,891 24-pound shell
131 8-inch shot
72,463 8-inch shell
17,401 10-inch shot
40,578 10-inch shell

Alongside this list is a hand-written notation: "all sold or otherwise disposed of" (New York Arsenal 1905).

The following year the arsenal stored 18,923 .30-caliber ball cartridges, 286,200 cartridge primers for small arms, 24,700 primers for black powder, and 261,500 primers for smokeless powder (Office of the Chief of Ordnance 1906a, 1906b). In 1909, the Frankford Arsenal received a shipment of 804 .30-caliber ball cartridges from the New York Arsenal (Office of the Chief of Ordnance 1909). In 1920, the arsenal was closed, and all of its stores were shipped to Raritan Arsenal in New Jersey (n.a. n.d.b).

4.2.3 MAGAZINES

At various times in the island's history, several magazines have provided storage for ammunition. The initial earthen Fort Jay in the 1790's had a powder magazine in the northeast corner. After the permanent fortress was built in 1805, the magazine was moved to the newly constructed ravelin on the north side of the fortress. An additional powder magazine was built in the open space between Fort Columbus and Castle Williams. This magazine was removed in the early twentieth century. An archaeological team may have encountered debris, consisting of the remnants of a wall, from this magazine in 1987 while doing a survey for a proposed utility trench (Bellamy 1897; National Park Service n.d.; The Cultural Resource Group, Louis Berger and Associates, Inc. 1987). Castle Williams and South Battery also each had storage magazines inside their walls (Corps of Engineers 1900). In 1885, the Barbette Battery had eight magazines completed, but it is not known if they were ever used since the battery was never finished (U. S. Engineer Office, New York City 1885). In 1924, the Quartermaster at Fort Jay requested a new powder magazine, saying that the current one was in poor condition and in a bad location. The requisition reveals that explosives were being stored in a warehouse on the south end of the island. The site of the new magazine was not given, and it is not known if the construction ever occurred (Quartermaster, Second Corps Area 1924). After the island's size was increased in the 1900's, three underground magazines were built on the south end of the island. Each one could store 215,000 rounds of .30-caliber ammunition. They were numbered T-20, T-24, and T-26, and

they were completed in 1937 (War Department 1937b, 1937c, 1937d). Two additional magazines, enclosed by a fence, were built sometime prior to 1950 along Fourteenth Road. By 1964, the area had been converted to a miniature golf course (Post Engineer 1950; n.a. 1964).

4.2.4 FIRING RANGES

Governors Island was a relatively small, populated military base, and there was not enough space for significant training ranges. There was, however, enough room for a few small arms ranges. In the 1930's, a small arms range had been set up in the filled-in land, but the exact location is not given (Guilds Committee 1992). The dry moat around Fort Jay also had several firing ranges. Two rifle ranges were set up; each one fired into the walls of the ravelin, and the southern portion of the moat housed a machine-gun range (Construction Division, Office of the Quartermaster General 1939). A list of the training facilities from 1943 indicates that firing on the ranges in Fort Jay was limited to .22-caliber rifles and .45-caliber pistols. Firing on the indoor range (located in the present-day Building 400) was also limited to .22-caliber rifles (n.a. 1943). There is, however, evidence that larger calibers of ammunition were fired on this range. The moat continued to be used occasionally as a range until the First U. S. Army departed in 1966. Space was so confined that the use of the range necessitated the temporary closure of the golf course (Headquarters, Fort Jay 1957, 1958).

4.2.5 CHEMICAL WARFARE MATERIALS

While not used extensively on the island, Chemical Warfare items were present at times. In 1934, the Sixteenth Infantry conducted some training assisted by screening smoke (*New York Times* 1934). In 1938, troops from the Second Corps Area demonstrated the use of some chemical warfare material for the New York section of the American Chemical Society (*New York Times* 1938). Other items noted on approved requisition forms were gas identification sets, smoke pots, and tear gas capsules (Headquarters, Second Corps Area 1939a, 1939b; Second Corps Area Chemical Officer 1942). The Chemical Warfare School conducted two demonstrations on the island in April 1942. During these presentations, the school used 44 magnesium training units, four solid oil bombs, five pounds of white phosphorous, eleven Thermit units (ten pounds), one-quarter pound Thermit starter mixture, and fifty pull wire fuse lighters (Maling 1942). In May 1944, Fort Jay personnel received training in the field identification of chemical agents (Army Service Forces 1944).

Governors Island's gas chamber (T-92) was completed in April 1941, and it was located on the extreme southern end of the island (War Department 1941). A photograph from the November/December 1941 issue of the *CWS Newsletter* shows a group of nurses emerging from a gas cloud on Governors Island (*CWS Newsletter* 1941). The report of chemical warfare activities in the Second Service Command for May and June 1944 details the training conducted at Fort Jay. During this time period almost 100 men stationed on the island went through the gas chamber, experiencing both tear and chlorine gas training (Army Service Forces 1944). The building was still identified as a gas chamber on a 1953 map (First Army Engineer 1953), but on a 1958 map it is called a Recreation Room (Office of the Post Engineer 1958), and by 1964 the building is used for a rod and gun club (n.a. 1964).

Research also uncovered a chemical warfare reference from 1955. The Fort Jay adjutant reported that the post had seven smoke grenades, 138 tear gas grenades and one smoke insert for a 4.2-inch mortar (Post Adjutant's Office 1955).

4.2.6 FOUND MUNITIONS AND EOD INCIDENTS

As mentioned previously, British warships bombarded Governors Island during the Revolutionary War. In 1944, the magazine *Army Life* reported that "British cannon balls fired on the island by Admiral Howe have often been found" (Methot 1944). No other information is provided in the article, and corroborating evidence was not found in any other sources.

In the 1960's the 542nd Ordnance Detachment was stationed at Fort Jay and responded to several incidents on the island. In April 1962, repairmen uncovered 80 rounds of .30-caliber ammunition while digging near what was then the quarters of a Colonel Testas. Unfortunately the building number was not noted. On two occasions in the next month, EOD personnel shipped tear gas grenades from the Consolidated Property Office on Fort Jay for destruction by burning; one shipment went to Fort Tilden and the other to Camp Drum (542nd Ordnance Detachment 1962b, 1962d, 1962e). In August of the next year, someone brought thirteen .45-caliber bullets to Fort Jay's historical office, which then turned the ammunition over to Ordnance personnel (542nd Ordnance Detachment 1963). In October 1964, forty-eight tear gas and thirty-one smoke grenades were found in the old Fort Jay. The incident reports lists the location as "Old Fort Jay (Dungeon)." These items were given to the 66th Ordnance Detachment for disposal elsewhere (542nd Ordnance Detachment 1964b).

In November 1993, several cannon balls were found by personnel replacing a water line behind Building 404. An army EOD team determined that one of the cannon balls contained black powder. It was isolated on the golf course and separated into two pieces by a C4-explosive charge. The black powder was then neutralized (Silva 1993).

4.3 INTERVIEWS

Summaries of interviews with personnel familiar with Governors Island are included in APPENDIX C.

4.4 PHOTGRAMMETRY AND MAPPING

4.4.1 MAP ANALYSIS

Unless otherwise noted, copies of the following historical maps can be found in APPENDIX F.

Construction Division, Office of the Quartermaster General.

1939 "Governors Island, New York Harbor, New York," dated
26 February. Map Drawer: GI Maps and Utilities, Building
107; Governors Island NY.

Three magazines, Buildings 20, 24, and 26, are located in close proximity to each other on the southern end of the island. Also identified on this map within the moat of Ft. Jay are a machine gun range (on the south side) and two rifle ranges (on the north side). (On file at U.S. Army Engineer District, St. Louis, CELMS-ED-P)

Corps of Engineers.

1867 Map of Governors Island, 1867. Record Group 77; Fortifications
File; Drawer 37; Sheet 55. National Archives II, Cartographic
Branch, College Park, MD.

Two Powder Magazines; one within Ft. Jay and one west of Ft. Jay, are identified on this map. North of Ft. Jay within the New York Arsenal is a Store House for Shot and Shells. East of Ft. Jay within the New York Arsenal are two Ordnance Storehouses, one Ammunition House, and an Ordnance Wharf.

Corps of Engineers.

1898 "Armament Sketch, Fort Columbus, New York," dated 31 December. Record Group 77; Fortifications File; Drawer 250; Sheet 1-18. National Archives II, Cartographic Branch, College Park MD.

By this time, Fort Columbus has five ravelins. This sketch identifies the seventy-seven guns mounted around the wall of the fort, one 13-inch sea-coast mortar within the northwest ravelin, two 8-inch and two 10-inch sea-coast mortars within the northern ravelin, and a magazine also located within the northern ravelin. The types of guns include 6½ Parrott Rifle, 8-inch Converted Rifles, 10-inch Rodman, and 15-inch Smoothbore (S.B.).

Corps of Engineers.

1900 "Armament Sketch, Forts on Governors Island, New York," dated 31 December. Record Group 77; Fortifications File; Drawer 250; Sheet 3-16. National Archives II, Cartographic Branch, College Park MD.

This sketch identifies armaments at Fort Columbus, Castle Williams, and South Battery. Seventy-seven guns (10-inch Rodman, 15-inch S.B., 100-pdr Parrott Rifle, and 8-inch Converted Rifle) are mounted on the walls around the fort, a 13-inch sea-coast mortar is within the northwest ravelin, and a magazine is within the northern ravelin. Castle Williams consists of three tiers and a Barbette where sixteen 10-inch Rodmans and five 15-inch Rodman Guns are mounted, and a magazine located in a detached building. South Battery consists of a magazine in the northeast corner and thirteen 10-inch Rodman Guns.

Corps of Engineers.

1912 "1912 Enlargement of Governors Island, New York." Record Group 77; Entry 802; Box 25: New York City, Governors Island; File: 5 Docks. National Archives-Northeast Region, New York, NY.

The original island boundaries and area consisting of 69.8 acres, surveyed in December 1901, and the addition between 1901 and 1912 consisting of 103.55 acres, surveyed in August 1912, are denoted.

First Army Engineer.

1953 "Site Plan of Fort Jay, Governors Island, New York," dated May.
Map Drawer: G. I. Maps and Utilities, Map Room, Building 107,
Governors Island NY.

All of the buildings are numbered, but not labeled. Former New York Arsenal Ordnance Storehouses are used as offices. Located on the southern end of the island are Building T-92--Gas Chamber and a Skeet Range. Also on the southern end are Buildings 127 and 128 (ordnance magazines) within a fenced area. The magazine, although not labeled, within Fort Jay is Building number 76.

First U. S. Army Engineers.

1962a "Map of Governors Island-1879," dated January. Map Drawer:
Historical 1879; Building 107; Governors Island NY.

Denoted are the original island boundaries, Fort Columbus, Castle Williams, South Battery, New York Arsenal, and a legend which lists a description of the buildings. Buildings 30 thru 34 (within the New York Arsenal) are Ordnance Storehouses, Building 50 is a Powder Magazine, and Building 55 (within the Barbette Battery--not labeled) is a Magazine. An inset identifies the original shoreline, Castle Williams, Fort Jay/Columbus, South Battery, and an airfield.

First U.S. Army Engineers.

1962b "Map of Governors Island-1908," dated March. Map Drawer:
Historical 1908; Building 107; Governors Island NY.

Denoted are the original island boundaries, Fort Columbus, Castle Williams, South Battery, Ordnance Wharf, and a legend which lists a description of the buildings. Buildings 39, 44, and 45 (previously Buildings 34, 33, and 32 within the New York Arsenal in 1879) are Storehouses, Building 60 (previously Building 50 in 1879) is a magazine. The magazine within Ft. Columbus is not numbered. An inset shows the original shoreline, Castle Williams, Fort Columbus, South Battery, the wharfs, and an airfield.

Governors Island.

1909 Real estate acquisition map for Governors Island. Map Drawer:
G. I. Maps and Utilities, Map Room, Building 107, Governors
Island NY.

Land donated to the U.S. by the act of State Legislature 15 February 1800, together with submerged land contiguous to the island conveyed by State Legislature on 07 May 1880, 07 March 1901, and 05 June 1903 is identified. A total of 68.76 acres of land is said to have been above water prior to filling operations.

n.a.

1921c Map of Governors Island, revised 28 November. Record Group 77; Entry 1007; Box 84; File 660 (NY Harbor, Defenses of). National Archives I, Washington DC.

Former New York Arsenal Ordnance Storehouses are currently used for offices. Also located on this drawing is an "Ordnance Wharf."

n.a.

1964 "Site Plan: Fort Jay, Governors Island," dated 01 September. Closed Historical Real Estate File, 5-30-95: Ft. Jay, NY. Real Estate Office, U.S. Army Corps of Engineers, New York District, NY.

Site plan from 1964 shows the road and building layout of Governors Island. The directory lists many buildings and their use. A Skeet Range (922) and an Incinerator (985) are located near the recreational area at the southern end of the island. The location of the former Gas Chamber is now used as a Rod and Gun Club. Also in this area is a feature labeled "983 (UG)". This is the same location as an underground ammunition vault identified on the map with citation, "Office of the Post Engineer 1958." The former fenced-in magazine area is now labeled as a miniature golf course.

National Park Service

n.d. "Historic Structures Inventory, Governors Island, New York: Volume I." Prepared for the Third Coast Guard District. Realignment and Closure Execution Team Room, Governors Island NY.

Included in this reference is a drawing of Ft. Jay. At the time of this drawing, 1801, Ft. Jay had only four ravelins. A powder magazine was located in the northeastern one.

Office of the Post Engineer.

1958 Map: "Fort Jay, Governors Island, New York," revised in 1958.
Map Drawer: GI Maps and Utilities, Building 107; Governors
Island NY.

The legend lists building numbers and their use. Ordnance related buildings include T-24--Ammunition Vault, 127--Magazine, 128--Magazine, T-245--Ordnance (believed to be where items used and disposed of the by the EOD were stored), and 136--Ordnance Wharf. A Skeet Range is also located south of T-24. Building T-92, formerly the Gas Chamber, is now identified as a Recreation Room.

Post Engineer.

1950 "Master Sewer Plan," dated 15 February. Map Drawer: GI
Maps and Utilities; Building 107; Governors Island NY.

Building numbers are identified, however, no description is listed. Ordnance related buildings and areas from previous maps include T-92 (Gas Chamber), T-24 (underground Ammunition Vault), 127 and 128 (magazines), 76 (magazine within Ft. Jay), and the Skeet Range. (On file at U.S. Army Engineer District, St. Louis, CELMS-ED-P).

U. S. Coast Guard, Third District.

1967 "Governors Island, New York, 1879," dated 05 May. Map
Drawer: Historical 1879; Building 107; Governors Island NY.

Denoted are the original island boundaries, Fort Columbus, Castle Williams, South Battery, New York Arsenal, and a legend which lists a description of the buildings. Buildings 30 thru 34 (within the New York Arsenal) are Ordnance Storehouses, Building 50 is a Powder Magazine, and Building 55 (within Ft. Columbus) is a Magazine. Also denoted, but not labeled, is the Barbette Battery.

U.S. Coast Guard, Third District.

1969 "Seawall Repairs, New York Base, Governors Island," dated
15 May. Map Drawer: GI Maps and Utilities; Building 107;
Governors Island, NY.

Located on the southern end of the island just south of the radio tower is Building 983 with a note, "Closed Entrance to Ammunition Magazine." South of this building is an area labeled "Area Under Construction." This is the location of the former ammunition vaults identified on the map with citation "Construction

Division, Office of the Quartermaster General, 1939." (On file at U.S. Army Engineer District, St. Louis, CELMS-ED-P).

U.S. Geological Survey.

1981 Jersey City Quadrangle, New Jersey-New York; 7.5 Minute Series (topographic), dated 1967 edition, photorevised 1981.

The USGS quad shows both planimetric and topographic features. Governors Island lies within the Hudson River and is subject to tidal changes during the course of a year. The island itself consists of relatively flat terrain and many buildings. (On file at U.S. Army Engineer District, St. Louis, CELMS-ED-P).

4.4.2 AERIAL PHOTO INTERPRETATION

Government and contractor personnel conducted an aerial photography search to find available imagery which covers the site. Generally, the search was limited to imagery with less than 1:24,000 scale and provided stereo viewing, but acquired others as needed. Photographic analysis and land use interpretation were performed using the following photographic sources:

<u>PHOTOGRAPHY DATE</u>	<u>APPROXIMATE SCALE</u>	<u>SOURCE</u>	<u>FRAME IDENTIFIER(S)</u>
Pre-1924	Unknown	Smithsonian Institute	U.S. Air Force pre-1954 Still Photo Collection
10 Jan 1924	Unknown	Smithsonian Institute	U.S. Air Force pre-1954 Still Photo Collection
1934	Oblique	Smithsonian Institute	U.S. Air Force pre-1954 Still Photo Collection
1934	Oblique	U.S. Army Military Institute	RG 97S #64
1936	Unknown	U.S. Army Military Institute	RG 97S #63
07 Dec 1944	1:9,000	DIA	ON 9853 47 thru 50 ON 9853 105 thru 112

08 Jun 1953	1:23,500	DIA	ON 3742 W 5 thru 9
1954	1:20,000	EROS	VBV 14-17 thru 19
10 Jul 1962	1:18,750	DIA	ON 3251 11 thru 15
23 Feb 1966	1:24,000	EROS	VBIO 2-71 thru 73 2-141 thru 144
23 Sep 1976	1:9,000	EROS	AB 7609 679 thru 682
23 Mar 1980	1:9,600	KEYSTONE	14-780 thru 784 15-809 thru 812
28 Mar 1990	1:7,200	KEYSTONE	KAS 90-36 14-97 thru 99
27 Mar 1996	1:7,200	KEYSTONE	KAS 96-82 7401-1123 thru 1125

The above photography was referenced using the Jersey City, New Jersey-New York 7.5' quadrangle; 1967 edition (photorevised 1981), and other historical maps obtained during research. Numbers in parentheses coincide with the feature numbers on that particular plate. NOTE: REPORT PLATES ARE FOUND IN THE CONCLUSIONS AND RECOMMENDATIONS VOLUME.

NO PHOTO PLATE--PRE-1924 MOSAIC MAP: A copy can be found in APPENDIX E--Historical Photographs. The exact date of this Mosaic Map is unknown. However, the most probable date is sometime prior to 1920 when the New York Arsenal closed and after the island was expanded in the early 1900's. Located on the southern end of the island are two rows of warehouses (one row on the western side and one row in the middle) with a rail line and several smaller buildings in between. Rail spurs are located approximately every other warehouse. Located in the moat on the southern side of Ft. Jay is a mound of what appears to be soil. Records dated in the 1930's indicate that a machine gun range was in this location. The mound may have been associated with this range.

NO PHOTO PLATE--10 JANUARY 1924 AERIAL PHOTO: By this time, the middle row of warehouses, the rail line and spurs, and the smaller buildings (as seen on the Pre-1924 Mosaic Map) on the southern end of the island have been removed. Several other buildings on the southern tip of the island have also been razed by this time. The mound within the moat of Ft. Jay is still visible. Again, this could have been used for a firing backstop for the machine gun range.

NO PHOTO PLATE--1934 OBLIQUE AERIAL PHOTO: The historical records state that the date of this photo is 1934. However, the construction of the current Building 400, originally Building 100--Regimental Barracks, was completed August 2, 1930 (War Department 1938). This building is currently located in the vicinity of the water tower which existed during the time of this photo. Therefore, the actual date of this photo is unknown, but is pre-1930. The mound within the moat of Ft. Jay is still visible. However, compared to the previous photo, it appears to have moved to the west. Again, this could have been used for a firing backstop for the machine gun range.

PLATE 3--1934 AERIAL PHOTO: The historical records state that the date of this photo is 1934. However, the construction of the current Building 400, originally Building 100--Regimental Barracks, was completed August 2, 1930 (War Department 1938). This building is currently located north of the area identified as the polo field (1). Therefore, the actual date of this photo is unknown, but is pre-1930. The view of Governors Island on this single oblique aerial photo is from the south to the north. Located on the southern end are several buildings and a railroad spur (3) south of a water tower. Several warehouses are located on the western side of the island. Documentation dated 1939 obtained from the archives states that a polo field and a small arms range were located on the southern end of the island. Based on the size of a polo field, the possible location is to the north of the railroad spur (1). An area approximately 800 ft long by 50 ft wide east of the water tower is possibly the location of the small arms range (2). It appears that there are twenty firing positions, or lanes, and a mound of soil (possibly the firing butt) south of these lanes.

PLATE 4--1936 AERIAL PHOTO: Stereo viewing could not be performed on this single aerial photograph. Therefore, interpretation is from a monocular view only. The majority of the warehouses seen on the previous plate have been removed by the time of this photo. Located in the field east of these former buildings is the possible former polo field (1) and an unidentified circular shaped feature (2) in the approximate location of the possible small arms range. South of this field are the remains of the railroad spur (3) seen on the previous photo. On the northern side of the island, Castle Williams (8), Ft. Jay, South Battery (7), several wharfs and buildings are seen. According to historical maps, a magazine (4) is located within Fort Jay, a powder magazine (5) had been located west of Fort Jay, and former Ordnance Storage Buildings (6), once part of the New York Arsenal in the late 1800's, are still visible. In addition, by the time of this photo, the construction of what is now known as Building 400, has been completed.

PLATE 5--1944 AERIAL PHOTO: Many new buildings replace the area where the warehouses once were on the western side of the island. Located in the open field east of this area is a baseball field, an area of disturbed soil (12) north of the ball field, and the circular feature (2) seen on the previous photo. It appears that water collects in this circular feature. Identified on 1921 historical maps, but not visible on the aerial photo is an Incinerator (16). By the time of this photo, the railroad spur has been completely removed. According to a map dated 1939, three underground storage magazines, a gas chamber (15), and two above ground storage magazines (13) are located in this vicinity. Although not visible in this photo, the approximate area of the underground storage magazines is outlined (14). On the northern side of the island, Castle Williams (8), Ft. Jay, South Battery (7), several wharfs, and buildings are seen. According to historical maps, a magazine (4) is located within Fort Jay, a powder magazine (5) had been located west of Fort Jay and former Ordnance Storage Buildings, once part of the New York Arsenal in the late 1800's, are still visible. According to a 1939 historical map, two rifle ranges (11) and one machine gun range (10) were located within the Fort Jay moat. The photo is too grainy to verify this.

NO PHOTO PLATE--1953 AERIAL PHOTO: Few changes from the 1944 photos are seen. According to maps dated 1950, a skeet range is located south of the Incinerator. However, the photo is too blurry to confirm this. All other features seen in the 1944 photos are still visible.

PLATE 6--1954 AERIAL PHOTO: Few additions from the 1953 photos are seen. A small feature in the location of an ammunition storage entrance denoted on historical maps is visible (14). According to maps, a skeet range (17) is located south of the ammunition storage area.

PLATE 7--1966 AERIAL PHOTO: There are minimal differences between the 1962 and 1966 photos; therefore, there is no photo plate for the 1962 photos. Ordnance related features listed on previous photos; magazines (13), former gas chamber (15), skeet range (17), etc., are also identified on this plate. No additional areas are noted.

PLATE 8--1976 AERIAL PHOTO: Many changes have occurred since 1966. Where warehouses once stood, several new buildings are in their place. Many baseball and other playing fields and several new buildings are on the field east of this area. The two magazines (13) have been replaced with large buildings and parking lots.

The area which includes the ammunition vaults (14) and gas chamber (15) has been cleared and replaced by new buildings and a parking lot. The skeet range (17) has been covered with concrete also. Two piers, Lima and Yankee, have been added to the eastern side of the island. Still visible are the former Ordnance Storage Buildings, Fort Jay, Castle Williams, South Battery, rifle ranges (11), and machine gun range (10).

PLATE 9--1980 AERIAL PHOTO: The buildings and parking lot in the area of the ammunition vaults (14) and gas chamber (15) have been razed and the ground cleared. All remaining features appear to be the same.

NO PHOTO PLATE--1990 AERIAL PHOTO: Three large buildings, several smaller buildings, and three parking lots have replaced the area of the former ammunition vaults and gas chamber. Remnants of the skeet range are still seen, but it doesn't appear to have been used for several years. The buildings on the eastern side of the island have been replaced by sixteen newer buildings.

PLATE 10--1996 AERIAL PHOTO: Very little on the island has changed since the 1990 photography. All features identified on the plate are previous ordnance related activities. These have been digitized onto the photo for reference purposes.

5.0 SITE INSPECTION

The site inspection included only visual and non-intrusive methods of inspection. The team followed a site safety and health plan (SSHP) prohibiting digging or handling of potential OE/CWM. The SSHP defined standard operation procedures to ensure safety and prevent accidents. APPENDIX G contains a copy of the SSHP. The inspection team consisting of Rochelle Ross (Team Leader) and Randy Fraser (Safety Officer), St. Louis District Corps of Engineers personnel, conducted a site survey of Governors Island on 8 April 1997.

The site inspection team walked and drove to each area associated with past ordnance and/or chemical warfare activity.

AREAS ASSOCIATED WITH PAST ORDNANCE AND/OR CHEMICAL WARFARE ACTIVITY

AREA	PAST ACTIVITY	CURRENT ACTIVITY
Ft. Jay	two rifle ranges, one machine gun range, and two ordnance storage magazines	ongoing lead remediation at rifle ranges; will begin investigation for lead at machine gun range; one magazine used for housing; other empty
New York Arsenal	open storage area for cannon balls	open field
South Battery	one magazine	Officer's Club
Castle Williams	two magazines	Not used. Had been used as Confederate POW Camp, as military stockade until 1966, then for storage.
Barbette Battery		Torn down in the late 1800's. Currently part of golf course and Brick Row Housing

**AREAS ASSOCIATED WITH PAST ORDNANCE
AND/OR CHEMICAL WARFARE ACTIVITY (CONT.)**

AREA	PAST ACTIVITY	CURRENT ACTIVITY
Powder Magazine		Torn down. Currently on the golf course.
Ordnance Magazines	two above ground located on the south side of the island	parking lots and buildings
Underground Magazines	three underground storage magazines on south side of island	parking lots and buildings
Gas Chamber	located on south side of island	parking lots and buildings
Skeet Range	located on south side of island	small park
Explosive Ordnance Disposal (EOD) Building		building gone and area replaced by housing.
Found Ordnance	mortars (cannon balls) found approx. 10 feet under ground near building 404	
Building 400	rifle range inside	lead remediation ongoing

No ordnance was found during the site inspection.

APPENDIX G contains a copy of the Site Inspection. APPENDIX D includes current site photographs, followed by a Plate which identifies the location and direction of each photograph.

6.0 AREAS OF INTEREST

Locations of all areas are denoted on PLATE 11--LOCATIONS OF PAST ORDNANCE RELATED ACTIVITY located in the CONCLUSIONS AND RECOMMENDATIONS VOLUME. The number in parentheses corresponds to the number on the plate.

6.1 FORTIFICATIONS

6.1.1 FORT JAY/COLUMBUS (1 AND 2)

For over 100 years, Ft. Jay's role was to defend New York City. Through the years the armament at the fort ranged from 18-pound to 42-pound cannons, mortars, cannonades, 10-inch to 15-inch guns, 100-pound Parrott guns, and 8-inch converted rifles. By the early 1900's, Ft. Jay no longer served an active role in defending New York City. Therefore, it is assumed the weapons were removed at this time. Also located at Ft. Jay were two magazines. When Ft. Jay consisted of only four ravelins, the magazine was located in the northeastern one. In 1805, the magazine was replaced and moved to the newly constructed northern ravelin where access doors were located within the fort and the moat. The actual contents stored is unknown. However, the USCG had stored small arms ammunition which was used on the rifle ranges.

6.1.2 CASTLE WILLIAMS (8)

Throughout its years as part of the Coastal Defense System, Castle Williams was equipped with 36-pound cannons, 42-pound and 15-inch smoothbore cannons, 42-pound rifled guns, and 8-inch, 15-inch and 32-pound guns. Also located within the fortress was a magazine. By 1900, Castle Williams had been completely converted into a prison.

6.1.3 SOUTH BATTERY (10)

South Battery, the smallest of the defense structures on Governors Island, housed 10-inch Rodman Guns and a magazine. Circa 1939, South Battery was renovated for use as an officer's club.

6.1.4 BARBETTE BATTERY (9)

The Barbette Battery was never completed. However, eight magazines and several temporary guns had been installed. By 1890, this battery had been completely removed and officer's housing was constructed in its place.

6.2 NEW YORK ARSENAL (5)

The facilities at the New York Arsenal included several ordnance storehouses, an ammunition storehouse, and several shot and storage areas. Thousands of ordnance items were stored at the Arsenal before they were shipped to other military facilities. Upon the Arsenal's closure in 1920, all items were shipped to Raritan Arsenal, New Jersey. Since the Arsenal's closures, the buildings have been converted into office space.

6.3 MAGAZINES

6.3.1 POWDER MAGAZINE (3)

This magazine was located between Ft. Jay and Castle Williams in the 1800's and was removed in the early 1900's. In 1987, an archaeological team may have uncovered remnants of the wall and foundation.

6.3.2 UNDERGROUND STORAGE MAGAZINES (14)

Three underground storage magazines, Buildings T-20, T-24, and T-26, were built on the south end soon after the island's size was increased in the early 1900's. Once they were completed in 1937, each could store 215,000 rounds of .30-caliber ammunition. Currently, the area is covered with parking lots and buildings. The exact date the vaults were replaced is unknown. However, T-24 is still identified on maps dated 1958. Per aerial photos, by 1976, the area has been cleared and replaced by parking lots and buildings.

6.3.3 MAGAZINES--BUILDINGS 127 AND 128 (13)

These two magazines were built and enclosed by a fence sometime prior to 1950. By 1964 the area had been converted to a miniature golf course and replaced by buildings by 1976. The capacity and items stored in each is unknown.

6.4 GAS CHAMBER (15)

The island's gas chamber, Building T-92, was completed in 1941 and used for both tear and chlorine gas training until at least 1953 when it was still identified as a gas chamber on a map. By 1958, Building T-92 was referred to as a Recreation Room, and identified on a 1964 map as a rod and gun club. It is presently referred to as Building S-928 and used as shop/storage building.

6.5 SMALL ARMS RANGES

6.5.1 INDOOR RIFLE RANGE (11)

The indoor rifle range, used by both the Army and Coast Guard, was located in the current Building 400. The exact dates of use is unknown. However, a 1943 document which lists training aids at Ft. Jay, includes nine indoor targets for .22-caliber rifles. There is, however, evidence that larger calibers of ammunition were fired on this range. The USCG completed lead remediation on the bullet trap and is currently remediating the remainder of the range.

6.5.2 OUTDOOR RIFLE RANGES (6 AND 12)

Two firing ranges were located within the moat of Fort Jay. According to documentation, the range was limited to .22-caliber rifles and .45-caliber pistols which were fired into the bricked-up access doors to the magazine and walls of the ravelins. The USCG is currently conducting lead remediation on these ranges.

Documentation from the 1930's states that a small arms range had also been set up on the filled-in land on the southern end of the island. The exact location is unknown. However, an area approximately 800 feet by 50 feet, with what appears to be 20 firing lanes, was detected on an aerial photo (see PLATE 3 for the location). This area is currently covered with parking lots, a road, and the athletic field.

6.5.3 MACHINE GUN RANGE (7)

A machine gun range, also located within the Fort Jay moat, was identified on a 1939 map. The direction of firing is unknown; however, during the site inspection, the western wall of the fort appeared to have been fired at more extensively than the eastern wall. Detected on several historical photos (located in APPENDIX E)

was a mound of dirt located within this area. This could have been used as a firing berm. The USCG is currently investigating conducting lead remediation at this range.

6.5.4 SKEET RANGE (16)

A skeet range was first identified on a 1953 map and first clearly seen on 1962 and 1966 aerial photos. The direction of firing would have been into the harbor.

6.6 LOCATIONS OF FOUND MUNITIONS

In the 1960's the 542nd Ordnance Detachment was stationed at Fort Jay and responded to several incidents on the island. In April 1962, repairmen uncovered 80 rounds of .30-caliber ammunition while digging near what was then the quarters of a Colonel Testas (building number unknown). Other items found on the island include tear gas and smoke grenades (most were found in the "Old Fort Jay (Dungeon)") and .45-caliber bullets. All of these items were found prior to the Army's transfer to the Coast Guard.

In November 1993, several cannon balls were found approximately ten feet below the surface behind Building 404. One of the cannon balls contained black powder.

REPORT PLATES

Report Plates are found in
Conclusions and Recommendations Volume

REPORT PLATES

<u>PLATE</u>	<u>DESCRIPTION</u>
1	SITE VICINITY
2	SITE LOCATION
3	1934 AERIAL PHOTO
4	1936 AERIAL PHOTO
5	1944 AERIAL PHOTO
6	1954 AERIAL PHOTO
7	1966 AERIAL PHOTO
8	1976 AERIAL PHOTO
9	1980 AERIAL PHOTO
10	1996 AERIAL PHOTO
11	LOCATIONS OF PAST ORDNANCE RELATED ACTIVITIES